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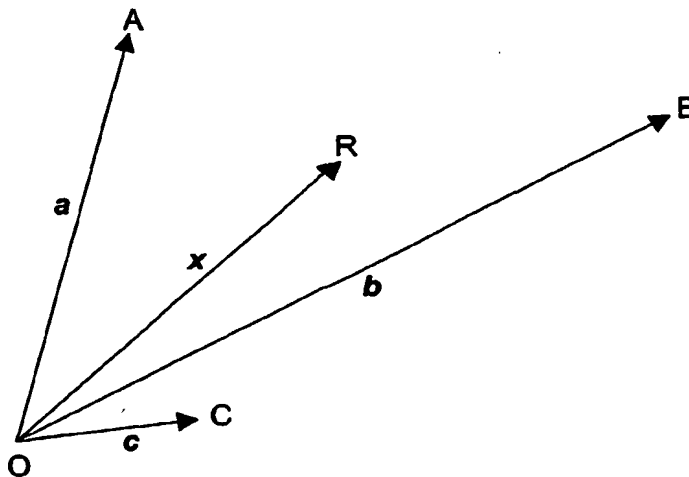
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- (75) Inventors/Applicants (for US only): **DUFFETT-SMITH, Peter, James** [GB/GB]; Cambridge Positioning Systems Limited, 62-64 Hills Road, Cambridge CB2 1LA For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: IMPROVEMENTS IN RADIO POSITIONING SYSTEMS



(57) **Abstract:** The present invention sets out to overcome the hearability problem in CDMA communications networks in which positioning services are provided, by using a separate sampling device (204, 205, 206) for each transmitter (201, 202, 203), which sends to the computing device (208) a representation of the signals transmitted only by that transmitter. A cross-correlation of the representation sent back by the mobile terminal (207) with the representation sent back by the sampling device in the brightest transmitter is performed in the computing device (208), and a blurred estimate of that brightest signal is subtracted from a blurred version of the representation sent back by the mobile terminal (207) in order to reduce its effect on the remaining signals as far as possible. The cross-correlation and subtraction steps are iterated until no useful signals remain to be extracted.

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